

## Brief Description of the Drawing

Figure 1A is a refractive index profile for a W shaped index fiber that can be made using the process of the invention;

Figure 1B is a refractive index profile for a soot body, identical to that used for Figure 1A, but without pre-sintering before fluorine treatment.

Figure 2 is a representation of a porous core rod in a fluorine doping furnace;

Figures 3 and 4 are schematic views of a section through a soot body before (Figure 3) and after (Figure 4) partial consolidation of the soot body according to the invention;

Figure 5 is a plot of doping time vs. refractive index change for equilibrium doping processes;

Figure 6 is a schematic view of a section through a silica particle treated by the incremental doping process of the invention showing the dopant distribution after the deposit step;

Figure 7 is a representative plot of dopant concentration vs. distance for the particle of Figure 6;

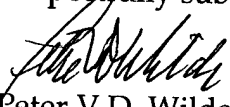
Figure 8 is a schematic view of a section the particle of Figure 6 showing the impurity distribution after the drive-in step; and

Figure 9 is a representative plot of dopant concentration vs. distance through the particle of Figure 6.



urethanes or acrylics. In commercial practice both materials may be low and high modulus acrylates. The coating thickness typically ranges from 150-300  $\mu\text{m}$  in diameter, with approximately 240  $\mu\text{m}$  standard.

Respectfully submitted,

  
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Date: **SEP 19 2001**

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